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CA Regional Water Quality Control Board
Central Valley Region
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**COMMENTS CONCERNING THE PROPOSED ORDER -
TENTATIVE WASTE DISCHARGE REQUIREMENTS
FOR THE TUOLUMNE UTILITIES DISTRICT**

To James Marshall and Anand Mamidi:

On August 19, 2008, the CA Regional Water Quality Control Board for the Central Valley Region released tentative waste discharge requirements (NPDES No. CA0084727) for the Tuolumne Utilities District and associated wastewater treatment districts in Tuolumne County. The Board requested comments or recommendations concerning the proposed Order and provided notice of the upcoming hearing.

For more than 18 years, our non-profit organization (CSERC) has served as an environmental watchdog and respectful advocate for water, wildlife, air quality, and other key ecosystem values across two million acres of the region north and west of Yosemite Park. For over a decade, we have attended the majority of TUD board meetings, provided input on highly technical water and wastewater issues, and we have consistently supported TUD in response to the majority of its projects and policies. However, for a decade, our Center has actively pressed TUD to take all appropriate actions in order to eliminate any need for continued discharges of millions of gallons of treated effluent into Woods Creek during wet year situations.

Again and again TUD has looked for active purchase of sprayfield properties or increased customers for treated effluent rather than making any concerted effort to reduce the volume of effluent at Quartz reservoir. Based on the TUD Feasibility Study from 2005 and other TUD documents, the first discharge into Woods Creek took place in 1995. Subsequent to that time, the District constructed two storage ponds (a 2-acre ft. pond on TUD's Egan Ranch property and enlargement of a 13 ac-ft pond to 16.3 ac-ft pond on the Gardella Ranch).

The amount of storage that can be utilized for storage at Quartz reservoir is listed as 1,304ac-ft, accounting for the effect of a "1-in-100 rainfall year" amount of rain. TUD's Feasibility Study noted that the RWQCB-required freeboard within the reservoir drops that amount by 40 ac-ft. of true availability.

From 1995 through 1999, the Discharger (TUD) released 81 million to 158 million gallons per year of treated and disinfected wastewater from Quartz Reservoir to Woods Creek in violation of Discharge Prohibition A-1. As a result of the discharges, the Regional Board adopted Cease and Discharge Order No. 5-00-002 on January 28, 2000. TUD then obtained an NPDES permit for the winter discharge of effluent from Quartz Reservoir to Woods Creek when flows in the creek are sufficient to create a 20:1 rate of dilution.

BACKGROUND – DISCUSSION OF PREVIOUS NPDES HEARING

When the NPDES/Order was being considered, I (John Buckley, CSERC executive director) testified before your Regional Board in opposition to granting that NPDES permit on two grounds. First, I noted that the secondary treated effluent contained some level of pollutants that posed at least some risk to aquatic resources and downstream users. I read from TUD reports showing that chlorine, ammonia, and other pollutants either persisted in the secondary treated water or had potential to be present, and that detectable levels of ammonia remained after discharge.

However, the main focus of my testimony at that previous NPDES hearing was to point out the complete lack of any concerted effort by TUD to adopt water conservation measures to reduce the amount of wastewater generated by TUD customers (and thus filling Quartz reservoir). The simplest way to stop a reservoir from overflowing is to reduce the amount of wastewater flowing into it. Yet, as I testified before the Regional Board at that hearing, TUD has consistently ignored requests to implement any strong water conservation-wastewater reduction program. Again and again, year after year TUD board members have publicly agreed that conservation could be a larger part of the district's overall program -- at some point in the future. No substantial funding has been allocated to water conservation programs that would reduce wastewater entering Quartz reservoir.

Accordingly, instead of applying water conservation pricing, promoting water conservation education, advertising low-flow toilets or shower heads, or initiating a wide range of other feasible water conservation policies and projects, TUD staff and board have instead focused almost entirely on finding new locations to spray treated effluent on spray fields or to locate new customers for treated effluent, rather than combining those active solution efforts with the basic step of reducing the amount of wastewater coming into Quartz reservoir. **At that previous NPDES permit hearing, I did not oppose TUD pursuing acquisition of new spray-field property or new customers as one part of any overall solution to excessive wastewater, but I urged the Regional Board to deny any new NPDES permit until TUD actually developed a realistic water conservation plan and had begun to implement water conservation measures.**

TUD officials testified with highly debatable claims in front of your board that TUD was actively pursuing water conservation and was actively working to reduce water use and wastewater production. Based on those claims that our Center believed were specious, the Regional Board approved the NPDES permit over the objections of our Center. No new requirement to come up with a clear, comprehensive water conservation program was tied to the NPDES permit approval. Accordingly, despite misleading information provided in the Urban Water Management Plan and the Feasibility Study, the Tuolumne Utilities District has made only the most minimal efforts to reduce water use and wastewater production.

THE PRESENT SITUATION UNDERSCORES TUD'S FAILURE TO ADOPT FEASIBLE CONSERVATION MEASURES TO REDUCE WASTEWATER

At the present time, eight years after the initial Cease and Desist order, TUD is once again asking the Regional Board for continued permission to be allowed to discharge secondary treated effluent directly into Woods Creek during the winter/early spring season. TUD, if granted the permit, can discharge an average of 2.9 million gallons per day averaged over a month. This is a huge amount of effluent that would once again be entering Woods Creek.

CSERC STRONGLY URGES THE REGIONAL BOARD TO REJECT THE PRESENT TUD REQUEST FOR A RENEWED NPDES DISCHARGE PERMIT.

In the past eight years, despite the objective to avoid discharges into Woods Creek, TUD has not put any significant staff time, resources, or money into any efforts to reduce wastewater coming into Quartz Reservoir from TUD customers. TUD has not pursued any significant, clear, coherent, effective water conservation program. Instead, TUD has potentially misled State and Regional Water Board officials in both its Urban Water Management Plan and in its Feasibility Study by making claims that are not accurate or that do not reflect what actually is taking place. In both documents TUD has attempted to convey that it is "promoting and encouraging water conservation," when in fact only the weakest, most minimal effort has been made to pursue water conservation (and any corresponding reduction in wastewater coming into Quartz reservoir).

FEASIBILITY STUDY IS INACCURATE CONCERNING CONSERVATION

In its August 2005, Feasibility Study of Reclamation System Improvements, TUD claims on page 11 that the District has an "ongoing commitment to water conservation." It goes on to claim: "In addition to the toilet replacement program and irrigation audits, the District has other programs that encourage and promote water conservation."

However, TUD's sole claims for having "other programs that encourage and promote water conservation" was to list an agreement with Master Gardeners to enhance commercial and residential water conservation and to describe work with a single homeowners association to develop an agreement to promote water conservation.

In reality, TUD's agreement with Master Gardeners to "enhance conservation" ended up being shelved by the Board of Directors in order to save money, and the minor agreement "to promote water conservation" with the Willow Springs Homeowners Association was so insignificant in TUD's overall water system as to be undetectable.

So, the only substantive "water conservation" program in the Feasibility Study that actually exists is the supposed "toilet replacement program." But is there really any such program? While paperwork suggests that a customer can come to the District office and ask for a \$45 rebate for each standard toilet that is replaced by an ultra-low-flush toilet, the low rebate is inconsequential compared to the actual toilet cost. Perhaps more important, there is no marketing or consistent advertising of this supposed toilet replacement program by TUD. If the Regional Board asks for proven documentation from TUD as to how many toilet rebates have been awarded annually over the past 5 years, the answer is likely to be highly revealing. The program is mostly, if not entirely, a paper program without any substantive benefit for water conservation.

That Feasibility Study also referred to the District's Urban Water Management Plan under the discussion of water conservation. **Looking at that Urban Water Management Plan, however, will show that TUD not only doesn't have any effective water conservation program, it doesn't even budget for such a program.**

THE URBAN WATER MANAGEMENT PLAN REVEALS HOW LOW A PRIORITY WATER CONSERVATION ACTUALLY IS WITH THE DISTRICT

The District's Urban Water Management Plan purports to show in Section 6 that TUD implements water conservation measures. It is highly revealing that in the initial paragraph of the Urban Water Management Plan, in discussing water conservation measures "being implemented by TUD," the Plan actually states: "TUD does not directly budget for conservation programs."

Specifically, here are a number of reasons why the latest (November 2007) Urban Water Management Plan Update underscores this lack of any commitment to implement an effective water conservation program by TUD.

1) On page 15 of the report, TUD shows no estimated increase in water conservation after 2013, seven years from now. The supply and demand comparison chart and text assumes that no further increase in demand conservation will take place because "the amount saved will remain constant or reduce over time due to the age and deterioration of installed water conservation devices and saturation of the market for the devices."

Since at this present time the overwhelming majority of existing TUD customers are nowhere close to having fully-effective low-flow fixtures, water-saving appliances, drip irrigation water systems, or any other conservation devices, any claim that such conservation measures will be saturated in seven years seems wildly fallacious.

2) Starting on page 18, in Section 6 TUD provides its list of Water Demand Management Measures that supposedly show the extent of TUD's water conservation

program “being implemented by TUD.” Please again note at the top of page 18 is the sentence that reads: “TUD does not directly budget for conservation programs.”

This becomes immediately apparent in item 6.1 below. TUD claims that TUD offers free residential water use surveys to customers “upon request.” In reality, the last sentence in that section admits that the “program has been eliminated for funding reasons.”

In item 6.2, the claim is made that TUD offers water-savings kits free to customers, yet as a TUD customer, I believe that I have NEVER received any written offer in any TUD mailing that underscores the availability of any such free kits, plus TUD does not contact its customers to find out if they are interested. That item notes: “TUD does not track the number of kits requested annually.” Since customers are not made aware of this “free” offer and TUD keeps no records as to whether any customers actually take advantage of this unpublicized offer, there is no validity in claiming it is an ongoing program.

In item 6.5, TUD claims that TUD reviews all landscape plans proposed for new developments in coordination with the County Planning and Building Department. Our Center’s staff engages with comments and public testimony in the vast majority of all new development proposals. We have not seen written input on ANY new development landscaping plans over recent years by TUD and have never seen any TUD representative show up to make landscaping irrigation suggestions at Planning Commission or Board of Supervisor hearings on such projects. This appears to be a highly questionable claim by TUD.

In item 6.6, TUD lists its “high-efficiency washing machine rebate program”. However, a careful reading of the text reveals that TUD does not actually offer any such high-efficiency washing machine rebate.

Many of the other items are equally debatable. Item 6.13 for example makes a claim that TUD enforces the no waste section of the water shortage contingency plan. Again, as a TUD customer, I believe that no one in my neighborhood has ever had a personal contact from TUD to ensure that water is not being wasted during dry or critical dry years, and I do not believe that TUD has staff actively out doing enforcement to restrict the filling of swimming pools, restricting sewer flushing, stopping car, boat, or building washing, or other such limitations.

Likewise, item 6.14 claims that TUD offers a program that provides for the payment of \$45 for each standard toilet that is replaced with an ultra-low-flush toilet. As noted in these comments above concerning the Feasibility Study, as a TUD customer I have never seen any highly visible marketing or public notification that such a program even exists, and I doubt that TUD has any statistical information to show that even one percent of TUD customers have ever taken advantage of such a “toilet rebate” program.

The bottom line for the Water Demand Conservation Program supposedly implemented by TUD is that there is no strong board or staff support for any such program. There has been no active support in the past and there is none at this time. There is no marketing or public advertising of the minimal water conservation incentives that are currently available, and there is no clear commitment by TUD to

actually ensure that customers are using water without excessive waste and with a high degree of efficiency.

While it is commendable that TUD runs a poster drawing contest in elementary schools to have kids create posters tied to wise water use, that is truly the main extent of public education that TUD does when it comes to water conservation.

Unless the Regional Water Quality Control Board ties any new NPDES permit to a requirement for TUD to create a realistic, effective water conservation plan to physically reduce wastewater production by TUD customers, then there will be no reduction of wastewater coming into Quartz reservoir. The likelihood for new discharges will continue.

There is no current TUD plan to change policy direction to shift towards emphasizing water conservation, nor is there any current plan for TUD to initiate actions that may eventually become necessary to comply with State water conservation goals and targets. On the contrary, TUD directors have publicly derided water conservation targets coming from the State or any legislative requirements that would require water conservation by TUD. TUD has actively lobbied against legislation that would require such water conservation.

TUD'S "DISTRICT WATER RULES – REGULATIONS" ALSO FAIL TO PURSUE OR TO IMPLEMENT EFFECTIVE WATER CONSERVATION MEASURES

Except in response to low water years where water rationing and conservation are triggered by a possible lack of water, the latest TUD Water Rules and Regulations fail to provide any effective, coordinated water conservation programs. As mentioned in the urban water plan, tiered rates can produce water conservation. But as shown on Page B-1 of Exhibit B of the Water Service Charges and Rates, there is no clear tiered-pricing incentive that will influence most residential or commercial customers to actively apply water conservation.

Under "Quantity Rates," the first 1,500 cu. ft. per 100 cu. ft. costs \$1.50 while the next 3,500 cu. ft. per 100 cu. ft. costs only 11 cents more - \$1.61. Under the so-called "Conservation Rate" a single family residential customer who averages less than 500 cubic feet per month can apply for and pay a reduced rate saving a whopping \$3 a month on the service charge and save another \$1.50 on the actual water.

Not many households are going to jump onto water conservation at the extremely low level of only 500 gallons per family for an incentive that would total @ \$4.50 a month. Even more important, qualifying single-family residential customers won't even get the incentive unless they happen to know that they have to actually apply for the discount rate. Their actual low use rate doesn't qualify them. They have to actually apply for the incentive rate or their low use goes without any compensation. Again, TUD makes no effort to market or to encourage even the weak water conservation measures that do actually exist.

DISCHARGE INTO WOODS CREEK CONTINUES TO ALLOW AMMONIA AND OTHER CONTAMINANTS TO POSE LOW RISK FOR AQUATIC SPECIES

As noted beginning on page F-17 of the Order, untreated domestic wastewater contains ammonia. The Order explains that the Discharger uses nitrification to remove ammonia from the waste stream, and that inadequate or incomplete nitrification may result in the discharge of ammonia to surface waters. On the same page, the Order notes that Woods Creek has a beneficial use of cold freshwater habitat and the potential for the presence of salmonids and early fish life stages. On page F-18, the Order notes that based on samples collected, "...ammonia in the discharge has a reasonable potential to cause or contribute to an in-stream excursion above a level necessary to protect aquatic life resulting in a violation of the Basin Plan's narrative toxicity objective."

Also on page F-18, the Order notes: "...it appears that the Discharger may be in immediate non-compliance upon issuance of the permit." The order goes on to require that the Discharger submit a compliance schedule for ammonia by the effective date of this Order. No matter whether such a compliance schedule is submitted or not, there will still be low levels of ammonia discharging into Woods Creek.

Likewise, levels of copper, manganese, and zinc have in the past exceed target levels and also create potential to affect aquatic life. Pathogens are assumed to be at a level below concern because the effluent coliform concentration does not exceed target levels, but introduction of effluent that has only had secondary treatment clearly poses at least some risk of pathogens affecting aquatic species.

SUMMARY OF OUR REQUEST TO RWQCB

Our Center shares RWQCB desires to see secondary treated wastewater kept out of Woods Creek. The creek flows down into Don Pedro reservoir. People boat to the creek and recreate at the mouth where it enters the reservoir. It is likely that some ill-informed, unwise people even drink from the creek and wash their hands in it. It is certain that a variety of aquatic and land-based wildlife species either live in the creek or consume water from the creek over extensive periods of time during the winter when discharges periodically take place.

While the evidence to date appears to show that the discharged pollutants are minimal and not egregious -- adding ammonia, copper, or other contaminants to Woods Creek along with potential hormones or medicines all adds up to a risk that is undesirable. Discharge of treated effluent into Woods Creek is truly not necessary.

TUD has had 8 years to solve its inadequate wastewater storage situation at Quartz reservoir. While making strides through the purchase of spray field property and enlisting more treated effluent customers, TUD still has not adopted the right combination of alternative measures necessary to eliminate the need for another NPDES permit.

On page F-49 of the Order, TUD is required to implement the land maximization alternative described in the Feasibility Study Report (August 2005). As noted in detail in these comments, that Feasibility Study incorrectly claimed that TUD was already doing an effective effort to reduce water use through water conservation education and programs. Any neutral evaluation of that claim will prove it false.

Accordingly, while our Center does not oppose the Board requiring TUD to pursue further land acquisition and implementation of spraying on existing district lands and on customers' lands, we DO oppose limiting TUD solely to spray it away alternative. We instead urge that the Board balance the active spray on land alternative with a reasonable level of wastewater volume reduction through prudent and effective water conservation and wastewater reduction planning and policies.

There are many reasons why our Center and others with concern in the community could reasonably ask that TUD's request for another NPDES permit be denied. Yet CSERC is not asking for TUD's NPDES permit request to be denied... as long as the Regional Board will tie any new NPDES discharge permit to a strong, mandated requirement with a specific timeline for TUD to develop a comprehensive water conservation program with specific objectives, timeframes, and funding.

We ask that the following condition be required in any new NPDES permit for the Tuolumne Utilities District that is approved by the RWQCB:

"By April 1, 2009, the Discharger shall submit a Water Conservation Study Report that describes, evaluates, and compares various alternatives for reducing water use and the production of wastewater by TUD customers so as to reduce the need for discharging excess wastewater from Quartz reservoir. The Report shall include a comprehensive list of water conservation measures presently being utilized by water/wastewater utility districts in at least 10 different counties of the State. The Report shall evaluate whether the listed water conservation are feasible or infeasible for the Discharger. The Report shall identify those water conservation measures that are feasible or infeasible (and the rationale for their selection) and shall also present a preliminary implementation schedule showing when the Discharger intends to adopt, and implement, the resulting water conservation plan, with specific measures clearly identified."

Our Center does not believe it is too much to ask that a Water Conservation Study Report and a subsequent Water Conservation Implementation Plan be required as a condition of gaining a new NPDES permit, since TUD staff assertively claimed at the previous NPDES permit hearing that the District was already encouraging and promoting water conservation.

If the Order as drafted is approved, TUD will be entitled to discharge millions of gallons of secondary treated effluent into Woods Creek for up to another five years. There should be some sort of reasonable trade-off required for so many years of permitted discharges and for so many hundreds of millions of gallons being allowed to be discharged into Woods Creek since 1995.

We urge our suggested “Water Conservation Study Report condition” or a modification of that condition be made a requirement for any new permit approval.

Respectfully,

John Buckley, executive director

Brenda Whited, staff biologist